

## **ABSTRACT**

A direct P2P transmission protocol between two virtual networks is disclosed in the invention, which is implemented on the Internet and includes

5 three procedures: the login procedure, the testing Network Address Translation (NAT) procedure, and the direct data transmission procedure. Among them, the location server located in the real Internet is to support the login procedure and the testing NAT procedure, and then the direct data transmission procedure can be executed after the detection of NAT-based router parameters has been

10 completed. The direct data transmission procedure, however, can do direct data packet transmission between two virtual IP networks without support from any proxy server. In addition, because the login procedure almost occupies none of the bandwidth resource and the testing NAT procedure takes very little connection time for completion, the direct data transmission between two

15 virtual IP points can thus be executed with plenty of time and in large quantity.